

ABSTRACT OF THE DISCLOSURE

A solid oxide fuel cell (SOFC) contains a first solid electrolyte layer of LaGa-based perovskite, an air electrode, a fuel electrode and a second solid electrolyte layer (having a hole transport number smaller than that of the first solid electrolyte layer), which is provided between the first solid electrolyte layer and an air electrode. Also, another SOFC contains a first solid electrolyte layer of LaGa-based perovskite, an air electrode, a fuel electrode and a third solid electrolyte layer (having electron and proton conductivity lower than that of the first solid electrolyte layer), which is provided between the first solid electrolyte layer and the fuel electrode. Still another SOFC contains the second solid electrolyte layer provided between a first solid electrolyte layer and an air electrode and the third solid electrolyte layer provided between the first solid electrolyte layer and a fuel electrode.